

Welcome to the Moors for the Future Partnership's guide to the birds, mammals, insects and reptiles of the moorlands of the Peak District National Park and South Pennines.

Use this guide to try your hand at spotting and identifying some of the many beautiful and fascinating animals that help to make these moorlands such important and unique places.

If you have a smartphone search for MoorWILD on the Apple and Android app stores to find our interactive version of this field guide.

Birds



Buzzard

Buteo buteo

- A medium sized bird of prey (length 48-56cm, wing span 110 - 130cm) with broad wings with obvious “fingers”.
 - Soars frequently and commonly seen sitting on fence posts and telegraph poles.
 - Eats a wide variety of prey; mostly voles, also rabbits, reptiles, amphibians, insects and birds. Can often be seen in fields eating earthworms.
 - Sexes are alike.
 - Voice - very vocal, often a plaintive mewing “pīīīyay” call, especially in flight.
 - The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve the moorland habitats they use to hunt throughout the year, including the breeding season.
-



Curlew

Numenius arquata

- Large (length 48-57cm (incl. bill), wing span 89-106cm), elegant brown wader with a long (9-15cm) strongly decurved beak.
 - Sexes are alike.
 - Voice - a beautiful bubbling call in flight. Also onomatopoeic “coorrlīīī” call.
 - The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.
-

Birds



Dunlin

Calidris alpina

- A small, starling-sized wader (length 17-21cm, wing span 32-36cm) with a rather short, slightly decurved bill.
- In summer plumage both sexes have a black belly patch, striped breast and rufous back.
- Voice - flight call is a buzzy, short “chheereet”. Song is a slightly mechanical ascending then descending whirring sound.
- The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.



Golden Plover

Pluvialis apricaria

- A shy medium-sized wader (length 25-28cm, wing span 53-59cm) with a small bill.
- In summer plumage the males has a striking black face, breast and belly (more washed out in female). This is offset by a white edge. Plumage on the wings and back appears brown from a distance but on close inspection is patterned with white, brown and golden hues. Breeds on moors - very well camouflaged against heather.
- The work carried out by Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.
- Voice in flight, or repeated as an alarm on the ground, is a thin, plaintive “piuuu” whistle that sounds like a squeaky wheelbarrow.



Kestrel

Falco tinnunculus

- A medium sized falcon (length 31-37cm, wing span 68-78cm).
 - Both sexes have a chestnut brown back with pale brown, heavily dark-streaked chest and belly. Males have a grey head, females brown. Hovers frequently when hunting with the long tail spread like a fan, and when in flight it has quick wing strokes and rarely glides (unlike sparrowhawk). Wings are long, pointed and narrow at the base.
 - Voice - often only heard when another bird of prey is present. Series of short, penetrating “kee, kee, kee, kee...” notes.
 - The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve the moorland habitats they use to hunt throughout the year, including the breeding season.
-

Birds



Lapwing

Vanellus vanellus

- Beautiful, black and white pigeon-sized wader (length 28-31cm, wing span 67-72cm). Lovely curved crest and iridescent dark green plumage on back contrasts with pure white undersides that gives a 'flickering' effect in flight. Has distinctly rounded wings and an aerobatic, rolling display flight.
- Voice - when displaying, song is extraordinary series of wheezy, bubbling notes delivered whilst tumbling through the air.
- The work carried out by Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.



Linnet

Carduelis cannabina

- Small (length 12.5-14cm) and slim finch typical of moorlands and heathland.
- In summer male has a crimson red forehead and breast and smart grey head. Females more subtle brown-grey. Nearly always found as a pair in the breeding season or in large flocks in the winter.
- Voice - Very vocal. Pleasing twittering song with longer, drawn out nasal notes.



Meadow Pipit

Anthus pratensis

- A small (length 14-15.5cm), buff-olive-brown, sparrow-sized passerine which is very common on moors and heaths.
- Often flushed from the ground a few metres from your feet, meadow pipits jink away uttering a thin "suu-eet" call. On closer inspection they are more elegant birds than sparrows with longer proportions incl. longer pink-orange legs and a streaked buff coloured breast.
- In the spring males climb high and perform trilling song flights "zi zi zi zi...zu zu zu...zvizvizvi...tuu tuu... tii-svia" and whilst parachuting down to earth. In the winter they gather together into loose flocks, often 20-30 together.
- The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.



Merlin

Falco columbarius

- Handsome, diminutive falcon (length 26-33cm, wing span 55-69cm) which is the smallest in the UK.
 - Males have blue-grey back and head with streaked orange breast. Females are mottled dark brown with paler streaked breast.
 - Voice - generally silent.
 - The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve the moorland habitats they use to hunt throughout the year, including the breeding season.
-

Birds



Peregrine

Falco peregrinus

- A powerfully built, large falcon (length 38-45cm, wing span 89-100cm male / length 46-51cm, wing span 104-113cm females) with females being larger than males.
 - Slate grey and blue-grey above with a strongly streaked white underside. Head is grey-black with an obvious black "moustache".
 - Voice - Call is drawn out "reeeeehhhkkk, reeeehhhkkk, reeeehhhkkk".
 - The work carried out by Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve the moorland habitats they use to hunt throughout the year, including the breeding season.
-



Raven

Corvus corax

- Large, heavily built crow (length 54-67cm, wing span 84-100cm) often heard well before being seen but are very shy and wary.
 - Extremely vocal often a deep, resonant "raarrp, raarrp, raarrp" but vocally dexterous.
 - Wedge shaped tail and very heavily built bill are diagnostic features in flight.
 - The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their habitats.
-



Red grouse

Lagopus lagopus scoticus

- Unmistakable game bird of heather moorlands. They are territorial and males will frequently seek out vantage points such as walls and rocky outcrops to keep an eye on their territory. The female of the pair will generally always be somewhere close by (but are much harder to spot due to their more camouflaged plumage and discreet habits).
 - About the size of a small, stocky chicken (Length 33-38cm).
 - Males have rusty red-brown plumage. Females are more brown and mottled. The males are very vocal and their unique song "goback, goback, goback", can be heard across the moors at all times of the year but most obviously during the breeding season.
 - The life history of red grouse is intrinsically tied to the heather moors. The birds spend all of their lives in and around heather, feeding on the shoots of younger plants and breeding/sheltering in the areas containing more mature plants.
 - The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their habitats.
-

Birds



Ring ouzel

Turdus torquatus

- The blackbird of the uplands - distinguished easily by the white/cream coloured crescent around neck.
 - Voice - alarm call is a harsh “tuck, tuck” reminiscent of a stone being struck against another stone. Song is loud and slightly mournful and repeated at a slow tempo.
 - The work carried-out by Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.
-



Short-eared owl

Asio flammeus

- Medium sized owl (length 33-40cm, wing span 95-105cm). A (partly) diurnal species of owl they have long wings and small, rounded head. Unusual buoyant flight, at times appearing butterfly-like.
 - Frequently perch on posts and readily on the ground. Plumage pale yellow-brown and buff-white; can appear whitish, especially against dark backgrounds and at dusk, but plumage more complex/patterned than the more crepuscular barn owl.
 - The work carried out by Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve the moorland habitats they use to hunt throughout the year, including the breeding season.
-



Skylark

Alauda arvensis

- Relatively large passerine (getting on for starling size) which is greyish-brown with a streaked breast and males can erect a blunt crest (although crest is not always obvious).
 - When flushed, skylarks have a fluttery flight and tend not to fly far, keeping low and dropping into vegetation.
 - Unmistakeable when males singing. Males rise from the ground, hovering and singing constantly to +150m.
 - The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.
-

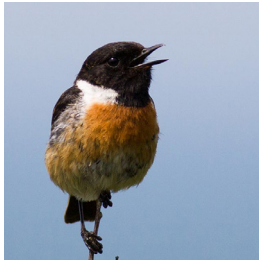


Snipe

Gallinago gallinago

- Dumpy, short-legged medium-sized (length 23-28cm, wing span 39-45cm) wader with beautiful mottled brown plumage. It has a long (7cm), straight bill which it uses to probe the ground for earthworms and insects.
 - If startled from the ground snipe will zig-zag away uttering a short croaky call.
 - In spring singing males may be seen perching on walls and fence posts. Males also have a display flight called ‘drumming’ where modified tail feathers reverberate during short, steep dives, making a bleating noise.
-

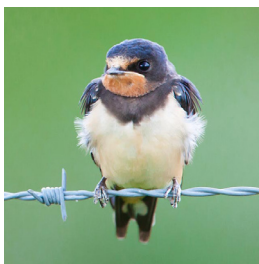
Birds



Stonechat

Saxicola torquata

- Stonechats are common and familiar birds of heaths and moors more or less robin sized.
- Often making themselves obvious by their constant calling (which sounds like two pebbles being knocked together), stonechats are usually found as a pair.
- Males are a smart bird with black head and chin, half white collar and unmarked orange underparts. Females are a slightly paler brown and have more obviously streaked upperparts.
- The work carried out by the Moors for the Future Partnership on the MoorLIFE project has helped to restore and preserve their summer breeding habitats.



Swallow

Hirundo rustica

- One of our most familiar summer migrants.
- Swallows arrive in early April (depart September/October) and adults can be easily told apart from other superficially similar hirundines (e.g. house martin) by the long tail streamers, most pronounced in males (short in juveniles).
- They have glossy blue-black upper parts and are largely white below with a deep-red face/chin (adults) or rusty buffy-white or brownish-pink (juveniles).



Twite

Carduelis flavirostris

- The twite is a handsome “brown jobby”; a small, streaked finch (length 12.5 to 14 cm).
 - Twite are rare birds in England and there are probably no more than 100 breeding pairs. Found on treeless moors and coastal heaths, sexes are alike and both bear some resemblance to a female linnnet. Overall, however, twite are more heavily dark-streaked birds with a distinctly buff tinged plumage. If you manage to get a good view there is no dark spotting or striping on the throat (which there is on linnets).
 - Male twite also have an attractive pink rump. In the autumn and winter twite have a yellow bill (with dark tip) which is a great way to distinguish them from linnets, which have a grey bill all the year through. Breeding pairs stay close together in summer.
 - The South Pennine moors are key to the world distribution of this endangered bird (sometimes referred to locally as the Pennine Finch). The Turley Holes and Higher House Moor project site, which covers 665 hectares of Site of Special Scientific Interest (SSSI) blanket bog, form part of England’s so called ‘Twite Triangle’ - an area that covers the South Pennines around Bradford, Halifax and Huddersfield.
 - The conservation work carried out for the Moors for the Future Partnership’s MoorLIFE project, protecting active blanket bog and introducing 190,000 native moorland plants, including bilberry and crowberry will benefit the twite population in both the short and long term.
-

Birds

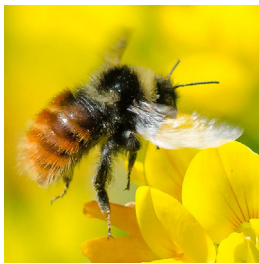


Wheatear

Oenanthe oenanthe

- One of the earliest summer migrants to return to the UK the wheatear is a distinctive bird of coastal grasslands and moorland habitats.
 - The size of a large robin (to which it is related), wheatears spend most of their time on the ground where they hunt for insects. Often inconspicuous until disturbed they are then easily identified by their bright white rump (wheatear is thought to be a corruption of “white arse”) and black T-shaped tip to the tail.
 - Males have a handsome light grey back, white underside with black wings and eye mask. Females are a toned down version showing more pale brown. Both sexes have a pale orangey-brown breast.
-

Insects



Bilberry bumblebee

Bombus monticola

- An upland specialist the bilberry bumblebee is largely found above 300m and is associated closely with the plants found there, such as the bilberry, cranberry and cowberry.
 - It is a distinctive small and compact bee having a yellow-to-red abdomen (bottom) and with a large pale yellow stripe on the thorax (below the head) with a less obvious one just above the abdomen.
 - As part of our conservation work the Moors for the Future Partnership plant a large number of bilberry shrubs to restore damaged habitats. This benefits many species such as the bilberry bumblebee that depend on such plants. The Peak District forms its southernmost range in Great Britain.
-



Black darter

Sympetrum danae

- A small darter (abdomen length is 18-24mm) which is typically on the wing in the late summer (mid-July to early September).
 - Favours shallow acid water pools where it frequently alights on vegetation.
 - Mature males are almost totally black with some yellow/orange on the side of the abdomen which darkens with age. Females/immature adults are a golden yellow while more mature females become browner.
 - Both sexes have completely black legs.
-

Insects



Brown Hawker

Aeshna grandis

- A large hawker (abdomen 49-60mm) which in flight gives the impression of being completely brown with bronze wings.
 - Males have small patches of blue on the side of the abdomen and blue eyes. Females have yellowish eyes.
 - Flight period is from late June to early October.
-



Common darter

Sympetrum striolatum

- A small dragonfly (abdomen length is 25-30mm). Males are orange-red and females/immature are yellow-brown. Legs are black with pale stripe running down length of the leg.
 - Restless but often alights on emergent vegetation and, unlike most other darters, also on the ground, rocks, fences etc. to bask. Very often returns to the same spot after a hunting flight or being disturbed.
 - Flight period is June-October (or even later in mild years)
-



Green Hairstreak

Callophrys rubi

- Unmistakeable butterfly when not in flight. Underside of wings are almost completely green and always rests with wings closed.
 - When in flight appears brown and is very inconspicuous.
 - On the wing in May and June.
 - Can sometimes be found in large numbers but both sexes spend much of their time at rest and might only be spotted when disturbed (it's worth checking any small butterfly disturbed from heather and gorse bushes during the flight period).
 - It has a wide range of larval food plants, including bilberry, cross-leaved heather and gorse.
-



Large red damselfly

Pyrrhosoma nymphula

- A very distinctive, common red and black damselfly which is often the first to be seen in Spring. The females have yellow bands on the abdominal segments.
 - Abdomen length is 25-29mm.
 - On the wing from April-August.
 - It can only be confused with the smaller and more scarce Small Red Damselfly (only found in West Wales, the South-West and areas of Southern England)
-

Insects



Large skipper

Ochlodes sylvanus

- The most widespread of our “orange” skippers it is also the largest (but is still relatively small).
 - A common sight in rough grassland and woodland rides in late May–mid Aug often found sitting on vegetation with forewings held up at an angle.
 - Mottled pattern of dark markings on both the upper and lower sides distinguishes from other orange skippers.
-



Orange-tip

Anthocharis cardamines

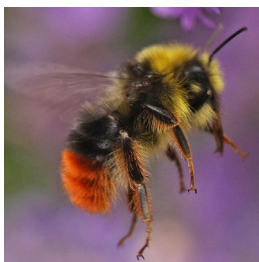
- The orange-tip is one of our most distinctive butterflies. Males are unmistakable with their clean white, orange-tipped wings and much more obvious than the more secretive females which lack the orange tips but have a dark margin around the forewing.
 - Both sexes have a beautifully olive-green/yellow marbled underside to the hind wing which is obvious when at rest.
 - Orange-tips are among the first butterflies to appear in the spring and will usually be on the wing from early April through to the end of June.
-



Peacock

Inachis io

- The peacock butterfly is one of the most recognisable in the United Kingdom due partly to its wide distribution across the UK but also its habit of visiting gardens to seek out buddleia and other nectar rich plants.
 - It can be seen throughout the spring, summer and autumn and sexes are alike. It is largely a claret red butterfly with four pronounced black, blue and yellow eyespots on the wings.
 - When at rest the dark brown hind wings offer very good camouflage against leaves and other vegetation.
-



Red-tailed bumblebee

Bombus lapidarius

- Probably our most easily recognised species with a black body and bright auburn-red tail. Males also have a yellow band on the chest and on the face.
 - It is a very common bumblebee, regularly seen in the garden. Large queens (twice the size of males and workers) emerge early in the spring from hibernation and all of the colony feed on the nectar of flowers right through to the autumn.
-

Insects



Small heath

Coenonympha pamphilus

- The small heath butterfly is very widespread across the United Kingdom and a common butterfly of meadows and other grassland habitats, not just heaths.
- As its name suggests it is a relatively small butterfly and one that is never seen at rest with its wings open. The upper-side of the wing is tawny with a black with a black spot on the forewing. The underside of the hind wing is greyish-brown and darker towards the head fading towards the rear and the underside of the fore wing is orange with a single white centred, black eyespot.



Tree bumblebee

Bombus hypnorum

- The tree bumblebee is a recent (2001) arrival to the UK. Despite this, it is already a very common bumblebee and will often take over bird boxes and so has become very familiar to naturalists and gardeners and has now reached Scotland and Wales.
- The colour banding of the tree bumblebee is unique amongst the UK species. The thorax (chest area) is ginger, the abdomen is black and the tail has a white tip.
- Queens, workers and males all share the same colour pattern.



White faced darter

Leucorrhinia dubia

- A small darter species (abdomen 21-27mm) found in and around peat bog pools.
- The Peak District is one of the best places in England to see this now uncommon dragonfly. A predominantly black darter. Males have a patches of red and orange and the females & immatures have pale yellow patches. As the name suggests, it has a cream-white face.

Mammals



Mountain Hare

Lepus timidus

- Although native to Britain, they died out between 2-6 thousand years ago. The present population was introduced in the late 1800s for sporting purposes.
 - Similar size to brown hare but with shorter ears and a coat that is grey or grey-brown rather than brown. Coat changes to white in the winter and they are easy to see in winter when there is no lying snow.
 - Mountain hares occupy heather moor, mixed moor, wet heath, blanket bog, areas of mixed heath and grassland and often lie up among rocks, shallow heather, clumps of bilberry or crowberry, in runnels, between tussocks of mat grass and in the open on the side of a peat grough or under a peat hag.
 - Mountain hares will benefit a great deal from the Moors for the Future Partnership's MoorLIFE project that has revegetated their moorland habitats, increasing food sources and cover from predators.
-

Mammals



Stoat

Mustela erminea

- Stoats are very similar to weasels in terms of body shape and colouration but are considerably larger, growing to 27-30 cm (males) 24-29 cm (females) in length (tail 9-14 cm) and can most easily be distinguished by the black tip to the tail. They have brown upper parts and a white cream underside separated by a neat, straight line.
- The coat may turn partially white during the winter months, and almost all white in areas that are snow covered (unlike weasels which never change colour in the UK).



Water vole

Arvicola amphibius

- Water voles are a similar size to brown rats but lack the long tail. They have a more rounded body shape in general and a blunt muzzle with short rounded ears.
- Always found in association with water, often the first sign is a characteristic “plop” as they enter the water when disturbed. Water voles often swim with the head and body above the water but they are also capable of swimming below the water. As well as frequenting typical lowland wetland habitats, water voles are also just as at home in upland ‘peatland’ areas.
- Water voles eat mostly vegetation including grass, reeds and sedges. The presence of water voles can often be told from areas they use for feeding where neatly chewed grass stems may litter the ground. Water voles mark their territories using latrines (droppings) located near the nest, burrow or favoured water’s edge platforms where voles leave or enter the water.

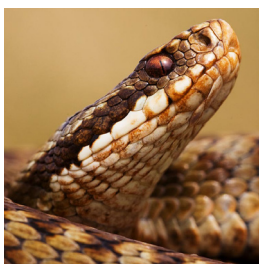


Weasel

Mustela nivalis

- The UK’s smallest carnivore (up to 22cm in length) with the male larger than the female.
- Ginger-brown fur with a cream coloured underside. Tail is short (looks docked) and lacks the black tip of a stoat.
- Weasels in the UK do not turn white in the winter.
- Predates small mammals such as voles and mice but also tackles rabbits.

Reptiles



Adder

Vipera berus

- The UK’s only venomous snake. Small and compact (50-80cm) with square looking head typical of vipers. Obvious dark zig-zag pattern down the back and black oval spots down the flanks. ‘V’ mark on the back of the head. Females are brown and have longer, fatter bodies than males which are silver-grey in colour.
 - Eyes are often red with vertical pupil.
-

Reptiles



Common lizard

Zootoca vivipara

- The most common of the two indigenous “legged” lizards found within the UK, the common lizard can be found in wide range of habitats from areas in wet meadows and bogs to dry sandy heathlands.
 - Most often seen whilst basking on walls, logs, fence posts or on sturdy vegetation. Extremely variable in colour but generally light-dark brown. Most males and some females have dark spots in their undersides. Males have brightly coloured undersides – typically yellow or orange, but more rarely red. Females have paler, whitish underparts. The throat is white, sometimes blue.
 - 13-15cm in length when fully grown.
-



Grass snake

Natrix natrix

- Grass snakes are completely harmless to humans (non-venomous) and are the largest indigenous snakes in the UK with males typically reaching 100 cm and females up to 130 cm. They are slender bodied with two yellow or white collars around the neck and the pupils are round not vertical slits.
 - Generally a pale olive green colour with black stripes down the flanks and a pale yellow-green belly. May feign death when startled (thanatosos), turning over on their backs and producing a foul garlic-smelling fluid from the anal-glands.
 - Always found close to water and are happy to enter water. Prey mainly on amphibians.
-

Moors for the Future Partnership

Since 2003, the Moors for the Future Partnership has been working to reverse more than 200 years of damage from industrial pollution and wildfires that left large areas of uplands bare of vegetation in the South Pennine Moors Special Area of Conservation and Special Protection Area.

The £5.5 million EU LIFE+ MoorLIFE project is a key part of the initiative. Its primary objective is to restore habitats of European significance – protecting active blanket bog by restoring bare and eroding peat. In just five years, more than 2,000 acres of Peak District and South Pennine moorland has been restored.



Photo showing cottongrass plugs being planted out

© Moors for the Future Partnership

The project has key benefits for communities on both sides of the Pennines in terms of improved landscape, water quality and diversity of upland fauna and flora. The blanket bogs are home to many important birds including the endangered twite, curlew and golden plover. Peat-forming Sphagnum moss, which has nearly disappeared from this area due to industrial pollution and wildfires, and other key upland plants - heather, cottongrass, bilberry, crowberry, cloudberry and cross leaved heath – has been re-introduced.



Photo showing healthy blanket bog

© Tim Melling

The MoorLIFE Project was funded by the EU Life+ programme, led by the Peak District National Park Authority and delivered by the Moors for the Future Partnership. Partners: Environment Agency, Natural England, National Trust, United Utilities, Yorkshire Water.

Find out more at www.moorsforthefuture.org.uk

